A PRESENTATION OF THE SCHEMATIC DESIGN FOR THE MEDICAL EDUCATION AND BIOMEDICAL RESEARCH FACILITY—BUILDING B PROJECT WILL TAKE PLACE AT THE MARCH MEETING

SUI B-1

MEMORANDUM

To: Board of Regents

From: Board Office

Subject: Register of University of Iowa Capital Improvement Business Transactions for Period of January 25, 2001, through February 21, 2001

Date: March 12, 2001

Recommended Action:

Approve the Register of Capital Improvement Business Transactions for the University of Iowa.

Executive Summary:

The University of Iowa requests permission to proceed with project planning for the **University Hospitals and Clinics—Development of a Pre-Surgical Evaluation Clinic** project which would improve patient services by consolidating a number of pre-surgical outpatient services within the Surgery Outpatient Clinic located in the Colloton Pavilion.

The University requests approval of program statements for the following projects:

University of Iowa Hospitals and Clinics—Renovation of Vacated Space for College of Public Health—Phase 3 project which is the last phase of the planned renovation of space in the General Hospital to house the College of Public Health;

Medical Education Building—Renovate for Physical Therapy project which would renovate space in the Medical Education Building for the functions of the College of Medicine Department of Physical Therapy which are currently located in the Steindler Building and Westlawn; and

Research Computed Tomography Scanner Facility—College of Medicine project which would construct a facility to house specialized CT Scanners for use in research on lung disease funded by the National Institutes of Health.

The University requests approval of the schematic design for the **Extension of Medical Education and Biomedical Research Facility—Building B** project which would construct a 131,500 gross square foot facility to house research facilities and administrative functions of the College of Medicine at an estimated cost of $40 million. Vice President and Dean Kelch and Executive Dean Nelson of the College of Medicine, and representatives from the project architects, Rohrbach Carlson and Payette Associates, will attend the March meeting to present the schematic design.

The University requests approval of the schematic design for the **Currier Hall—Dining Area Renovation** project which would renovate the former dining area for a variety of student service functions. The schematic design drawings for the existing space and the proposed renovation project are included with the Board's docket materials.

The University requests approval of the project description and budget ($861,000) and engineering agreement with Shive-Hattery ($73,296) for the **University Parking Systems—Parking Lot 3 Reconstruction** project which would upgrade the parking lot adjacent to the English-Philosophy Building.

The University requests approval of project descriptions and budgets and engineering agreements with Benchmark, Inc., for the following roof replacement projects:

Power Plant—Replace Roof project ($434,000) and engineering agreement ($16,600) for the replacement of three areas of roofing materials;

MacLean Hall—Replace Roof project ($303,000) and engineering agreement ($12,400) for the replacement of the entire roof area of this Pentacrest building; and

Chemistry Building—Replace Roof project ($291,000) and engineering agreement ($12,462) for the replacement of several sections of roofing materials.

The University presents for Board ratification a project description and budget for the **University of Iowa Hospitals and Clinics—Telecommunications System Upgrade** project ($2,300,000) which was approved by the Executive Director to allow the University to proceed with the purchase (including discounts) of the telecommunications equipment.

The University requests approval of a revised project budget ($3,157,100) for the **University Hospitals and Clinics—DeGowin Blood Center Relocation** project due to additional costs for interfacing and fireproofing structural systems in the General Hospital, and relocating a laboratory area.

The University requests approval of a revised project budget ($294,000) for the **Power Plant—Regenerative Feedwater Heater Addition** project to meet additional building system requirements.

The University requests approval of amended project budgets for the **Newton Road Parking Facility** ($12,800,000) project to include Parking System Improvement and Replacement Funds as a source of funds, and the **University Parking Systems—Hospital Parking Ramp No. 2—Facility Improvements** ($1,360,000) project to include Parking System Revenue Bonds as a source of funds. The addition of these fund sources to the respective projects would allow the University to allocate the bond funding among the two projects to meet arbitrage rebate requirements. (The total amount of each project budget would not change.)

The University requests approval of an engineering agreement with Shive-Hattery ($54,628) for utility design services for the **Honors Center** project.

The University requests approval of the following amendments to engineering agreements:

Amendment #2 ($33,952) to the agreement with Shive-Hattery for various additional services for the **Health Sciences Campus—Newton Road Relocation** project; and

Amendment #1 ($33,000) to the agreement with A and J Associates for additional design services for the second construction contract for the **University Hospitals and Clinics—Pharmacy Storage, Processing and Office Support Facility—Phase 2** project.

The University requests approval of Change Order #1 in the deduct amount of $320,000 to the construction contract with Merit Construction Company for the **Institute of Hydraulics Research—Hydraulics Laboratory Modernization** project to reduce the total amount of the contract and provide savings to the project budget.

Background and Analysis:

University Hospitals and Clinics—Development of a Pre-Surgical Evaluation Clinic
Source of Funds: University Hospitals Building Usage Funds

Project Summary

	Amount	Date	Board Action
Permission to Proceed		March 2001	Requested

This project would renovate approximately 20,000 gross square feet of space in the Surgery Outpatient Clinic (first floor of the Colloton Pavilion) to provide a Pre-Surgical Evaluation Clinic. According to UIHC, the increase in outpatient surgical procedures at UIHC requires more efficient pre-surgical patient evaluation.

The trend to limit or eliminate the patient's inpatient stay has required significant changes in the manner in which pre-surgical evaluations are conducted. During the mid-1990s, UIHC attempted to address the need to provide more timely pre-surgical evaluations by creating an anesthesia evaluation clinic as one component of the Ambulatory Surgery Center. This clinic was initially successful in facilitating the pre-surgical process; however, with the increasing number of patients utilizing the service, it has been difficult to continue to provide these services in an efficient and convenient manner. Consequently, patients often wait several hours to be seen by the clinicians who conduct portions of the evaluation. Patients must also visit up to seven additional clinical locations to complete the evaluation.

To address the current operational deficiencies, a UIHC task force comprised of physicians, nurses and administrative staff, with assistance from a consultant familiar with pre-surgical evaluation processes in use at other hospitals, reviewed the present model for providing pre-surgical services at UIHC and models used at similar teaching hospitals. This review led to development of a more efficient and cost-effective concept for conducting pre-surgical evaluations by the Departments of Anesthesia, Surgery, and Internal Medicine.

The new concept is based on four core requirements: An appropriate information system is required to permit patient information to flow with the patient through the process. A dedicated staff of physician assistants and nurse practitioners is necessary to complete each patient's pre-operative workup and nursing assessment. A partnership is required between physicians in the Departments of Anesthesia and Internal Medicine to ensure the evaluation is conducted in a thorough and timely manner. To accommodate the projected patient volume, there must be available a dedicated clinical setting of adequate size in a central location and in close proximity to diagnostic radiology services to avoid duplication of expensive technological resources.

UIHC reports that it evaluated five options for the location of the Pre-Surgical Evaluation Clinic; it concluded that the Surgery Outpatient Clinic location is the only area within UIHC that would meet the core requirements of the pre-surgical evaluation process within existing space. The Surgery Outpatient Clinic is located immediately adjacent to the UIHC future main entrance lobby and registration/admitting service facilities to be developed on the first floor of the Carver Pavilion. The central location of the Surgery Outpatient Clinic within the UIHC complex would facilitate access by patients referred from other outpatient clinics. In addition, the Diagnostic Radiology Suite, and Magnetic Resonance Imaging Center are both located in the Colloton Pavilion and are easily accessible from the Surgery Outpatient Clinic.

The existing Surgery Outpatient Clinic space would be renovated to incorporate the Pre-Surgical Evaluation Clinic. The Surgery Outpatient Clinic would continue to serve as the ambulatory clinic setting for the general, vascular, transplant, and plastic surgery divisions of the Department of Surgery. Due to the increasing number of patients who would utilize this area with development of the Pre-Surgical Evaluation Clinic, the existing patient waiting area would require renovation and expansion to provide additional patient education facilities, staffing rooms for resident and medical student education, and an expanded patient chart control area to facilitate better the flow of documentation through the clinic. In addition, since the existing area for the Surgery Outpatient Clinic was developed approximately 20 years ago, the project would provide refurbishment and new furnishings for the existing space.

The project would include major renovation of approximately 6,000 square feet of the existing 20,000 square foot space, and minor renovation (upgrading of finishes) for the remaining 14,000 square feet. The project would be undertaken in several phases to permit outpatient services to continue while the project proceeds.

The estimated cost to develop the Pre-Surgical Evaluation Clinic is approximately $1.8 million, which would be funded with University Hospital Building Usage Funds.

University of Iowa Hospitals and Clinics—Renovation of Vacated Space for College of Public Health—Phase 3

Source of Funds: College of Medicine Gifts and Earnings and/or Income from Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Permission to Proceed		March 2000	Approved
Program Statement—Phase 1		March 2000	Approved
Project Description and Total Budget—Phase 1	$ 2,598,000	March 2000	Approved
Architectural Agreement—Three Phases (Baldwin White Architects)	327,500	March 2000	Approved
Construction Contract Awards—Phase 1			
General Construction (McComas-Lacina Construction)	1,276,881	June 2000	Ratified
Asbestos Abatement (EnviroBate Management Services)	221,229	July 2000	Ratified
Project Description and Total Budget—Phase 2	87,000	March 2000	Not Required*
Construction Contract Award—Phase 2 (McComas-Lacina Construction)	75,739	April 2000	Not Required*
Program Statement—Phase 3		March 2001	Requested

* Approved by University in accordance with Board procedures for projects under $250,000

A total of approximately 32,000 square feet of vacated space in the General Hospital will be remodeled to house portions of the College of Public Health. The three-phase project, at a total cost of approximately $4.2 million, will remodel space on the first and second floors of the General Hospital which previously housed the Department of Otolaryngology, Hospital Dentistry Institute, and the UIHC Blood Center. The project, which is one component of the Health Sciences Campus Plan, will relocate occupants from the remaining portion of the Steindler Building, which will be demolished.

The Phase 1 project, which is currently under construction, includes the remodeling of approximately 16,500 square feet of space on the second floor of the General Hospital. The space will be renovated to house the Preventative Intervention Center, Lipid Research Clinic, Epidemiology and Biostatistics. The Phase 2 project, which has been completed, included the renovation of approximately 1,350 square feet of space on the second floor of the General Hospital to house a portion of the administrative offices of the College and a classroom.

The Phase 3 project, at an estimated cost of $1,550,000, would renovate a total of 11,504 net square feet of space in the General Hospital (4,207 net square feet on the first floor, and 7,297 net square feet on the second floor) to complete the renovation project for the College of Public Health. The Phase 3 project would house the Departments of Health Management and Policy, and Community Behavioral Health, as well as additional administrative offices, student space and support areas for the College.

The following is the space summary for the Phase 3 project.

First Floor			
College of Public Health Administration			
Office Areas (Finance, Admissions, etc.)	1,281		
Health Science Computer Laboratory	645		
Information Technology/Server Rooms	584		
Student Commons	484		
File/Storage/Mail/Supply/Work Room	477		
Reception Area/Conference Room	413		
Restrooms	179		
Other	144		
Total Net Assignable Space		**4,207**	nsf
Total Non-Assignable Space		1,518	
Total Gross Square Feet		**5,725**	gsf
Net-to-Gross Ratio = 73 Percent			
Second Floor			
Health Management and Policy			
Office Areas	1,901		
Conference Room/Reception Area	572		
Computer Laboratory	261		
Copy Room/Work Room	130		
Student Support Room	127		
		2,991	nsf
Community Behavioral Health Program			
Office Areas	2,267		
Restroom	51		
		2,318	nsf
College of Public Health Administration			
Office Areas (Administrator and Associate Deans)	1,130		
Conference Room/Reception Area	574		
Work Room	156		
Restroom	128		
		1,988	nsf
Total Net Assignable Space		**7,297**	nsf
Total Non-Assignable Space		1,307	
Total Gross Square Feet		**8,604**	gsf
Net-to-Gross Ratio = 85 Percent			
Program Total			
Total Net Assignable Space		**11,504**	nsf
Total Non-Assignable Space		2,825	
Total Gross Square Feet		**14,329**	gsf
Net-to-Gross Ratio = 80 Percent			

Medical Education Building—Renovate for Physical Therapy

Proposed Source of Funds: University of Iowa Facilities Corporation Revenue Bonds, College of Medicine Gifts and Earnings, and/or Income from Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Health Sciences Campus Plan Permission to Proceed		May 1996	Approved
Program Statement		March 2001	Requested
Architectural Agreement (Baldwin White Architects, Des Moines, IA)	$ 234,000	March 2001	Requested

This project, which is one component of the Health Sciences Campus Plan, would renovate 16,121 gross square feet of space in the Medical Education Building to consolidate the Department of Physical Therapy of the College of Medicine. These functions are currently located in 5,800 square feet of space in Westlawn and 8,415 square feet of space in the remaining portion of the Steindler Building, which will be demolished. The Westlawn space was renovated in 1998 to provide a temporary location for the teaching functions of the Department which relocated from the west wing of the Steindler Building prior to its demolition.

The project would renovate two floors of the west wing of the Medical Education Building; the University reports that cost estimates for the project have yet to be developed. The project would renovate 7,940 gross square feet on the upper level to house clinical teaching laboratories, locker rooms for student and patient use, and office areas. In addition, the project would renovate 8,180 gross square feet on the lower level to house various instructional laboratories and other student areas including a media resource room, lounge and study area. The project would include minor demolition; asbestos abatement; patching of walls, floors and ceilings; installation of additional air conditioning units for the classroom and clinic areas; electrical upgrades; carpeting; and painting.

The University reports that the space to be renovated currently houses the Clinical Trials Research Program for the Women's Health Initiative and Prevention Intervention Center, which would relocate to a portion of renovated space for the College of Public Health in the General Hospital. The University reports that the Medical Education Building space also houses non-laboratory research programs of the Department of Psychiatry, which would be relocated to

leased space. The University has indicated that the vacated space in Westlawn would house office functions of the Department of Psychiatry which would relocate from leased space.

The University requests approval to enter into an agreement with Baldwin White Architects to provide full design services for the project. The agreement provides for a fee of $234,000, including reimbursables.

The following is the space summary for the Physical Therapy renovation project.

Upper Level			
Clinical Teaching Laboratory, Teaching Clinic and Teaching Support	3,513		
Office/Support Areas	2,059		
Locker Rooms	808		
Conference Rooms	523		
Reception Area	286		
Mail Room/Copy/Kitchen	253		
Total Net Assignable Space		**7,442**	nsf
Total Non-Assignable Space		498	
Total Gross Square Feet		**7,940**	gsf
Net-to-Gross Ratio = 94 Percent			
Lower Level			
Laboratories (Cardiopulmonary, Neuromuscular, Orthopaedic, EMG/Motor Control, Biomechanical)	3,009		
Media Resource Area/Lounge/Study Area	1,095		
Mechanical/Electrical Shops, Building Engineer, Storage	973		
Graduate Assistant's Office	752		
Maintenance/Mechanical	466		
Conference/Classroom	292		
Vending	210		
Total Net Assignable Space		**6,797**	nsf
Total Non-Assignable Space		1,383	
Total Gross Square Feet		**8,180**	gsf
Net-to-Gross Ratio = 83 Percent			
Program Total			
Total Net Assignable Space		**14,239**	nsf
Total Non-Assignable Space		1,881	
Total Gross Square Feet		**16,120**	gsf
Net-to-Gross Ratio = 88 Percent			

Research Computed Tomography Scanner Facility—College of Medicine

Proposed Source of Funds: College of Medicine Gifts and Earnings and/or Income from Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Permission to Proceed		July 2000	Approved
Architectural Selection (Design Professionals Collaborative)		July 2000	Approved
Authorization for Executive Director to Approved Negotiated Architectural Agreement		July 2000	Approved
Program Statement		March 2001	Requested

This project would construct a facility to house CT Scanners and related support facilities for use by the Department of Radiology for a study of image and model-based analysis of lung disease. The scanner would support a five-year, $7 million Bioengineering Research Partnership grant from the National Institutes of Health to the College of Medicine. The long-range goal of the project is development of a computer-based model of the human lung which would serve as an atlas against which an individual patient's lung scans can be matched to identify disease processes at their earliest stages. This research facility would aid in the early detection of various lung diseases and would be used for research in environmental asthma currently being undertaken by the College of Public Health. The facility would also provide the needed outcomes and safety measures for a number of important new drug trials.

The project would construct a two-level facility of approximately 5,500 gross square feet to house two research CT scanners and associated support space. The scanner facility would be located adjacent to the south side of the Medical Research Facility. (A map which indicates the proposed location for the facility is included as Attachment A.) The project would also include construction of a new entry vestibule from the Medical Research Facility to provide access to the scanner building, and relocation of a break area at the Facility.

The University indicated in July 2000 that it was considering, for this project, the use of a manufactured modular facility of up to 4,000 gross square feet, specifically designed for the CT scanner application, and attached to a permanent building. However, a feasibility study undertaken to evaluate the type of building to house the scanners recommended the construction of a facility on-site, which, according to the University, would provide a lower-cost option than the use of a modular building.

The scanner facility would include a total of 5,956 gross square feet (4,948 net square feet) on the two levels. This would include 2,978 gross square feet (2,534 net square feet) of research space on the ground level, and 2,978 gross square feet (2,414 net square feet) of utility area in the basement level. The total project cost is estimated at up to $2.5 million.

The following is the space summary for the Research Computed Tomography Scanner Facility.

Ground Level			
CT Areas	1,117		
Work Areas	547		
Animal Areas	277		
Waiting	147		
Restrooms	133		
Storage	152		
Computer Servers	110		
Other	51		
Total Net Assignable Space		2,534	nsf
Total Non-Assignable Space	444		
Total Gross Square Feet		2,978	gsf
Net-to-Gross Ratio = 85 Percent			
Basement Level			
Mechanical Room	2,212		
CT Power/Control Cabinets	202		
Total Net Assignable Space		2,414	nsf
Total Non-Assignable Space	564		
Total Gross Square Feet		2,978	gsf
Net-to-Gross Ratio = 81 Percent			
Program Total			
Total Net Assignable Space		**4,948**	nsf
Total Non-Assignable Space		1,008	
Total Gross Square Feet		**5,956**	gsf
Net-to-Gross Ratio = 83 Percent			

Extension of Medical Education and Biomedical Research Facility—Building B
Proposed Source of Funds: University of Iowa Facilities Corporation Revenue Bonds

Project Summary

	Amount	Date	Board Action
Permission to Proceed		Nov. 1999	Approved
Architectural Selection (Rohrbach Carlson)		May 2000	Approved
Architectural Agreement—Programming Services and Schematic Design through Construction (Rohrbach Carlson)	$ 2,416,700	July 2000	Approved
Building Program		Feb. 2001	Approved
Schematic Design		March 2001	Requested

This project would provide a facility of 131,500 gross square feet of additional biomedical research space as an extension (also known as Building B) to the Medical Education and Biomedical Research Facility. The additional space is needed to accommodate the current and anticipated growth in the College of Medicine's research activities. In addition, the building would provide space to house the administrative offices of the College of Medicine. The estimated cost for construction of Building B is $40 million, with financing proposed from the sale of a combination of taxable and tax-exempt bonds to be issued by the University of Iowa Facilities Corporation, as discussed with the Banking Committee at its February 2001 meeting.

Building B would be constructed to the east of the Medical Education and Biomedical Research Facility (MEBRF) on the current site of the east wing of the Steindler Building. The building would be a linear extension of the MEBRF, with replication of as many details of MEBRF as possible, consistent with the physical form of the addition, program requirements, and the master plan. The footprint of Building B has been offset from the main building by approximately nine feet to the south; this would provide the needed definition for the exterior of Building B while maintaining the linear extension with the main building. (A map which indicates the proposed location of Building B relative to the MEBRF is included as Attachment B to this docket memorandum.)

Building Interior

Building B would consist of a total of seven levels. The basement and lower levels of Building B would consist primarily of research laboratory and building support spaces, including animal care facilities. The Basement Level would house mechanical and electrical equipment and a nuclear magnetic resonance suite to house two shielded magnets. The design for the suite has been kept generic to accommodate large field nuclear magnetic resonance equipment from either of the two vendors currently manufacturing the equipment. In addition, special provisions have been made to facilitate installation and removal of the heavy equipment in the Basement Level. This includes an overhead crane rail to negotiate changes in floor level and to provide exterior access. The Basement Level would also provide a tunnel connection to Westlawn to the northeast.

One floor above at the Lower Level, the Animal Care Unit would extend from the main building to Building B. The cage rooms in Building B have been designed with the same layout and dimensions as those in the main building to maximize the flexibility and interchangability of rooms. The Animal Care Unit in Building B also includes a variety of shared procedure rooms with a flexible design so they could be used as procedure rooms or specialized cage rooms.

Level 1 would house the administrative units of the College of Medicine. This would include office and conference areas for the Dean of the College of Medicine and several major collegiate administrative functions. A large conference facility with support spaces and a reception area is planned for the east end of the building on this level. The location of these areas near the main building entrance at the southeast corner would facilitate their use for general University functions.

Levels 2 through 5 would provide research laboratories. The configuration of the laboratory areas and the use of materials and equipment would be consistent with the modular design of the laboratory areas in the main building. A group of public spaces consisting of a computer room, and formal and informal conference rooms, would be located at the east end of each of the laboratory floors. The layout of the four levels would be identical, with the exception of a BL-3 laboratory suite which would be located on Level 5 (the exact location has yet to be determined). This area would be included in Building B to meet the need for a second BL-3 laboratory on the Health Sciences Campus.

With the exception of the Basement Level, each floor of the facility will have one male and one female restroom area. The exact fixture counts will be determined during the design development phase of the project.

To ensure that MEBRF and Building B function as a single entity, the interior corridors have been aligned so that the Building B footprint would not impede the interior transition between the buildings; all floors of Building B would be

connected at the same elevation with the main building. In addition, the use of interior materials similar to those used in the main building, such as exposed architectural white concrete, stainless steel window systems, and custom wood millwork, would reinforce the concept of a single, unified facility to encourage interaction among all of the College of Medicine populations.

The building program approved in February 2001 provided a total of 127,000 square feet of space. However, during the schematic design phase, this amount increased slightly to a total of 131,500 gross square feet (74,400 net square feet), to provide additional usable areas on all floors of the building.

Site and Building Exterior

Building B would provide the northern boundary for the quadrangle area of the Medical Education and Biomedical Research Facilities. Since Levels 1 through 5 would be above the courtyard elevation to the south, Building B would serve as the focal point for all of the prominent buildings in this area of the Health Sciences Campus.

Building B would have an exterior expression identical to the main building with the same use of building materials. This would include the use of copper panels for the areas which house administrative functions, and limestone veneer for the areas which house research functions. In addition, the use of consistent exterior materials would provide a visual connection between the buildings and maintain the integrity of the quadrangle space.

The roof design would be an extension of the MEBRF roof. The University anticipates that a rubber membrane roofing system, consistent with the roofing system for MEBRF, would be used for Building B. The final determination of the roofing system would be made during the design development phase of the project.

The project budget would be submitted for Board approval at the completion of the design development phase. This would ensure that all design issues have been addressed and are reflected in the project budget.

The University anticipates that the building would be publicly bid during the first quarter of calendar year 2002.

Currier Hall—Dining Area Renovation
Source of Funds: Dormitory Improvement Reserves

Project Summary

	Amount	Date	Board Action
Permission to Proceed		Oct. 1999	Approved
Architectural Selection (Rohrbach Carlson)		April 2000	Approved
Architectural Agreement (Rohrbach Carlson)	$ 407,500	June 2000	Approved
Program Statement		Dec. 2000	Approved
Project Description and Total Budget	4,998,000	Dec. 2000	Approved
Schematic Design		March 2001	Requested

This project will renovate the former dining area in the west wing of the first floor of Currier Hall, a residence hall. Food service has not been provided in this area since the residential east campus food service operations were consolidated in Burge Hall in 1991. The project will develop a variety of student service functions in the space.

The main entry to the area would be located along the east wall from the building corridor. This entrance would open into the central area of the space (the former kitchen area), which would house the vending machines and seating for 60; this central area would also serve as a corridor, providing access to other areas in the space. The restrooms would be located adjacent to the main entrance.

The multi-purpose room, the largest space, would be located to the south of this central area. This room would provide tables and seating for 150 students for study, entertainment and social activities. A stage would be located along the east wall of the room for entertainment and education activities. The area would be designed to provide a nightclub atmosphere with bright high-tech colors, textures and furnishings.

A second, smaller multi-purpose room would be located to the north of the central area (part of the former dining area). This area would house two pool tables, overhead televisions and lockers. A computer room with 47 computer terminals, two monitor stations, and a waiting area would be located to the east of the smaller multi-purpose room.

A quiet study lounge with seating for 80 students would be located in the far west area (also former dining space). Included within this space would be an enclosed arcade adjacent to the central seating area.

With the exception of the computer room, all of the student areas would be directly accessible from the main entrance. Additional entrances to the area at the northeast and southeast from the main building corridor would also provide access to the space; the northeast entrance would provide access to the computer room.

Additional areas adjacent to the building corridor would also be developed as part of the project. Included would be a student government office along the east corridor near the main entry, and a formal conference room for 15 to 20 people along the south corridor. A landscaped exterior patio area totaling 10,745 square feet would also be developed within the central courtyard area between the Currier and Stanley Residence Halls.

Restrooms

The renovated area would include two fully-accessible restrooms (one male and one female). The restrooms would provide a total of two female toilet fixtures, one male toilet fixture, one urinal, and two male and two female lavatories. The University has indicated that the number of restroom fixtures is consistent with the State Building Code.

The project will also provide a number of building infrastructure improvements and install new mechanical and electrical equipment in 14,085 square feet of renovated basement space.

University Parking Systems—Parking Lot 3 Reconstruction

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 861,000	March 2001	Requested
Architectural/Engineering Agreement (Shive-Hattery, Iowa City, IA)	73,296	March 2001	Requested

This project would reconstruct Parking Lot 3 which is located immediately south of the English-Philosophy Building and adjacent to the Iowa River. (A map which indicates the location of the parking lot is included as Attachment C.) Currently, the parking lot can accommodate up to 388 vehicles; approximately half of the parking spaces are reserved for faculty and staff, and the remainder are made available to students and the general public on an hourly paid basis.

The parking lot was last resurfaced in 1969 and is in need of repair. The project would remove and replace the deteriorated asphalt surface and reconfigure the lot to increase its capacity to accommodate 415 vehicles, 13 of which would be accessible to persons with physical disabilities. In addition, the reconfigured parking area would improve vehicle and pedestrian circulation. The project would also include storm water drainage improvements and the installation of new lighting and trees.

Permission to proceed with planning was not required for this project since the estimated cost does not exceed $1 million.

The University requests approval to enter into an agreement with Shive-Hattery to provide design services for the project. The agreement provides for a fee of $73,296, including reimbursables.

Project Budget

Construction	$ 700,000
Design, Inspection and Administration	
Consultants	83,396
Design and Construction Services	7,500
Contingency	70,104
TOTAL	$ 861,000
Source of Funds:	
Parking Reserve Fund	$ 811,000
Utilities Enterprise Improvement and Replacement Fund	50,000
TOTAL	$ 861,000

Power Plant—Replace Roof
Source of Funds: Utilities Enterprise Improvement and Replacement Fund

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 434,000	March 2001	Requested
Architectural/Engineering Agreement (Benchmark, Inc., Cedar Rapids, IA)	16,600	March 2001	Requested

This project would replace three sections of the Power Plant roof, which, according to the University, are no longer repairable and are in need of replacement. The roof sections total approximately 17,000 square feet (approximately 40 percent of the roof area) and range in age from 18 to 30 years. The existing roof areas consist of an asphalt and coal tar material; the University has indicated that the typical life expectancy for these materials is 15 to 20 years.

Each of the three roof areas would be replaced with a different roofing material. The University reports that, due to the presence of building equipment and foot traffic, a roofing material with a high level of durability is needed for a 9,000 square foot area. A rubber membrane roofing material covered with concrete pavers would be installed for this area.

A modified bitumen roofing system would be installed on a 7,000 square foot area of the roof. The University has indicated that while this material provides a lower level of durability than the rubber membrane and concrete materials, it is appropriate for this particular roof area which is subject to a moderate level of foot traffic.

A rubber membrane roofing system would be installed on the 1,000 square foot skylight roof area. This area consists of many irregular slopes, and therefore it is less subject to damage from foot traffic.

The University reports that the life expectancies for the roofing materials, with proper maintenance, is 15 to 20 years.

Work would include removal of existing built-up roof material and insulation down to the structural deck; replacement of deteriorated roof decking; modification of penthouse bases; installation of the new roofing materials; installation of new roof drains; and painting of roof top equipment.

Permission to proceed with planning was not required for this project since the estimated cost does not exceed $1 million.

The University requests approval to enter into an agreement with Benchmark, Inc., to provide design services for the project. The agreement provides for a fee of $16,600, including reimbursables.

Project Budget

Construction	$ 360,600
Design, Inspection and Administration	
Consultants	22,000
Design and Construction Services	15,300
Contingency	36,100
TOTAL	$ 434,000

MacLean Hall—Replace Roof
Source of Funds: Building Renewal or Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 303,000	March 2001	Requested
Architectural/Engineering Agreement (Benchmark, Inc., Cedar Rapids, IA)	12,400	March 2001	Requested

This project would replace the 25-year-old MacLean Hall roof. The existing 15,000 square foot roof is no longer repairable and is in need of replacement.

The existing roof consists of a 20-ply, built-up roofing system. The University has indicated that previous roof replacement projects overlaid new materials onto the existing roof area. These materials have a typical life expectancy of 20 years or more, and the most recent roof replacement was completed approximately 25 years ago.

The project will include removal of all existing roofing materials and installation of the replacement roof consisting of a thermoplastic membrane material. The University has indicated that this roofing material was selected based on its appearance as well as its high performance level, since the roof of MacLean Hall is visible from various campus locations. The University reports that the life expectancy for this roofing material, with proper maintenance, is 25 years or more.

Work would include removal of existing built-up roof materials and insulation down to the structural deck; covering and roofing over obsolete skylights; installation of a new fully-adhered roof system and associated metal flashings; and installation of new roof drains.

Permission to proceed with planning was not required for this project since the estimated cost does not exceed $1 million.

The University requests approval to enter into an agreement with Benchmark, Inc., to provide design services for the project. The agreement provides for a fee of $12,400, including reimbursables.

Project Budget

Construction	$ 249,900
Design, Inspection and Administration	
Consultants	15,202
Design and Construction Services	12,100
Contingency	25,798
TOTAL	$ 303,000

Chemistry Building—Replace Roof
Source of Funds: Building Renewal or Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 291,000	March 2001	Requested
Architectural/Engineering Agreement (Benchmark, Inc., Cedar Rapids, IA)	12,462	March 2001	Requested

This project would replace a number of sections of the Chemistry Building roof, which, according to the University, are deteriorated and leaking, and in need of replacement. The roof sections total approximately 10,400 square feet (approximately 20 percent of the roof area) and range in age from 11 to 22 years. The roof areas to be addressed consist of a rubber membrane roofing system; the University has indicated that the typical life expectancy for these materials is 10 to 20 years, depending on the installation method. The University reports that renovation projects at the Chemistry Building in recent years have included only patching of selected roof areas as rooftop equipment was removed and/or replaced.

The roof areas would be replaced with a fully-adhered rubber membrane roofing system. The University has indicated that this material is appropriate for use on the Chemistry Building due to the large number of pipe penetrations on the structure. The University reports that the life expectancy for this roofing material, with proper maintenance, is 15 to 20 years.

The roof areas which are only 11 years of age total approximately 3,000 square feet and are located near a rooftop soil and sand storage bin, and greenhouse. The University reports that the deterioration of these roof areas resulted from moisture penetration from the storage bin and the greenhouse to the underside of the roofing material and not from a defective roofing material. The University indicates that this condition could have been avoided with the construction of a concrete isolation curb, at the point where the greenhouse and storage bin meet the roofing material, when the facilities were constructed in the early 1960s. The

University further indicates that it would have been difficult to anticipate the current deteriorated condition of the roof area when it was replaced 11 years ago. The University reports that the water penetration conditions would be corrected as part of this roof replacement project with removal of the storage bin, and installation of an isolation barrier consisting of a modified bitumen roofing material at the greenhouse.

Work would include removal of the existing roof systems to the structural deck; abatement of 6,500 square feet of asbestos-containing vapor barrier; removal of obsolete rooftop equipment; installation of new tapered insulation; and installation of the new fully adhered membrane roof system and associated flashings.

Permission to proceed with planning was not required for this project since the estimated cost does not exceed $1 million.

The University requests approval to enter into an agreement with Benchmark, Inc., to provide design services for the project. The agreement provides for a fee of $12,462, including reimbursables.

Project Budget

Construction	$ 238,000
Design, Inspection and Administration	
Consultants	17,062
Design and Construction Services	11,838
Contingency	24,100
TOTAL	$ 291,000

University of Iowa Hospitals and Clinics—Telecommunications System Upgrade
Source of Funds: Telecommunications Facilities Revenue Bonds

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 2,300,000	March 2001	Ratification*

* Approved by Executive Director in accordance with Board procedures.

This project would upgrade the UIHC telecommunications system which is 14 years old and at the end of its useful life. The University requested Executive Director approval of the project description and budget in order to meet the deadline for receiving discounts of approximately $1.8 million for the purchase of the telecommunications equipment. The project budget was approved by the Executive Director on March 8, 2001, in accordance with Procedural Guide §9.01 A.2., which authorizes the Executive Director to act on behalf of the Board on capital procedure actions, subject to ratification by the Board, when failure to take immediate action would have an adverse impact on institutional programs, cause an unnecessary delay in the program, result in increased cost, or when it is otherwise in the public interest.

Project Budget

System Equipment	$ 1,832,000
Installation and Programming	429,000
Contingency	29,000
TOTAL	$ 2,300,000

University Hospitals and Clinics—DeGowin Blood Center Relocation
Source of Funds: University Hospitals Building Usage Funds

Project Summary

	Amount	Date	Board Action
Permission to Proceed		May 1997	Approved
Program Statement		Oct. 1997	Approved
Architect/Engineer Agreement (A and J Associates)	$ 103,215	July 1997	Approved
Schematic Design		Oct. 1997	Approved
Project Description and Total Budget	2,584,000	Oct. 1997	Approved
Revised Project Budget	2,690,315	Nov. 1998	Approved
Construction Contract Award (Knutson-MidAmerica Construction)	2,287,900	Nov. 1998	Approved
Revised Project Budget	3,157,100	March 2001	Requested

This project will develop 21,000 square feet of space on the second floor of the General Hospital to house the DeGowin Blood Center, which will relocate from 7,200 square feet of space on the first floor of the General Hospital. The project will develop patient and donor phlebotomy and treatment units, and laboratories and staff support facilities required for the efficient operation of the Blood Center. In addition, the relocation will provide more efficient service to the inpatient care units and operating room suite which are the primary users of the Blood Center's services.

The University requests approval of a revised project budget in the amount of $3,151,100, an increase of $460,785. The revised budget reflects increased project costs resulting from numerous hidden conditions that were identified in the project area since the construction project commenced in late 1998 and the re-design of laboratory areas within the Blood Center space.

The majority of the additional costs can be attributed to three factors. The first of these included difficulties with interfacing the six different types of building structural systems that exist within the project area. The multiple systems, which are the result of five separate building additions to the General Hospital since its construction in 1926, were not apparent until after the demolition work was completed. The existence of the multiple structures necessitated changes in the design of the building utilities to be installed within these areas.

The second factor was the need for code-required fireproofing for three of the six building structures. To bring these structures into compliance, it has been necessary to fireproof approximately 8,000 square feet of exposed structural steel.

The third factor was the relocation and re-design of the Blood Center Hematopoietic Progenitor Cell (HPC or stem cell) laboratory to an area where it would be better protected from the radiation treatment vaults within the Radiation Oncology Center located on the first floor below. The equipment within the vaults produces an extremely low level of radiation at the floor level of the space originally planned for the HPC laboratory. Multiple studies conducted before and during construction indicated that this level of radiation was well within acceptable regulatory levels and posed no hazard to the future occupants of the laboratory. However, after construction commenced, the Blood Center administration expressed concern that even an extremely low level of radiation posed a potential risk to the stem cells that would be processed and stored in the laboratory for eventual transfusion.

The University determined that it would not be practical to reduce further the radiation from the Radiation Oncology Center to provide additional protection for the HPC laboratory at the proposed location. Consequently, the HPC laboratory was relocated to another area within the Blood Center where there would be no risk of radiation exposure to the stem cells. This re-design of the laboratory has resulted in significant construction delays; the project was placed on hold in April 2000, and the additional radiation testing and the required modifications to the project design and materials for the HPC laboratory have been completed since that time.

The University reports that it has reviewed with the project engineers the modifications to the project, and it is confident that all existing conditions have now been identified. The University reports that all necessary modifications are reflected in the revised project budget of $3,157,100.

The estimated completed date for the blood processing and storage laboratories, including the HPC laboratory, is September 2001. All other areas of the Blood Center have an estimated completion date of April 2001.

Project Budget

	Revised Budget Nov. 1998	Revised Budget March 2001
Construction	$ 2,348,400	$ 2,858,900
Architectural/Engineering Support	118,815	201,400
Planning and Supervision	58,700	18,300
Contingency	164,400	78,500
TOTAL	$ 2,690,315	$ 3,157,100

Power Plant—Regenerative Feedwater Heater Addition
Source of Funds: Utility Enterprise Improvement and Replacement Fund

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 250,000	Feb. 1998	Approved
Revised Project Budget	294,000	March 2001	Requested

This project will install two regenerative feedwater heaters in the main power plant. The addition of the heaters will allow the feedwater to be heated to a higher temperature before steam is made in the boiler. This addition will improve the efficiency of the power plant steam cycle and result in less fuel consumption. Savings from this modification are expected to result in a project payback period of two years.

The University requests approval of a revised budget in the amount of $294,000, an increase of $44,000. The revised budget reflects an increase in the project scope to address additional structural steel and instrumentation requirements, which were determined during the final design phase of the project. The University attributes the delay with the project to the inability in obtaining necessary parts from the manufacturer in a timely manner due to hurricane damage to the manufacturing plant.

Project Budget

	Initial Budget Feb. 1998	Revised Budget March 2001
Construction	$ 225,000	$ 273,680
Design, Inspection and Administration	10,000	20,320
Contingency	15,000	0
TOTAL	$ 250,000	$ 294,000

The University requests approval of amended project budgets for the **Newton Road Parking Facility** and the **University Parking Systems—Hospital Parking Ramp No. 2—Facility Improvements** projects. The amended project budgets would incorporate an additional source of funds without changing the total project budget.

The Newton Road Parking Facility project amended budget includes Parking System Improvement and Replacement Funds; the Hospital Parking Ramp No. 2 project amended budget includes Parking System Revenue Bonds. Adding the respective fund sources would allow the University to apply a portion of the Parking System Revenue Bond proceeds to the Hospital Parking Ramp No. 2 project, and then reduce bond funding for the Newton Road Parking Facility project. This action would permit arbitrage rebate requirements for the bonds to be met. While the Parking System Revenue Bonds were sold in January 1999 to finance primarily construction of the Newton Road Parking Facility, the description for the use of the bond proceeds includes a provision to permit use of the bond proceeds on other parking system projects. The University estimates that the shift in funds between the two projects would be less than $1 million.

Newton Road Parking Facility

Project Summary

	Amount	Date	Board Action
Health Sciences Campus Plan			
Permission to Proceed		May 1996	Approved
Architectural Agreement— Schematic Design (Herbert Lewis Kruse Blunck)	$ 55,000	July 1996	Approved
Schematic Design		June 1997	Approved
Project Description and Total Budget	11,950,000	June 1997	
Architectural Agreement— Design Development (Herbert Lewis Kruse Blunck)	695,815	June 1997	Approved
Revised Project Budget	12,800,000	Sept. 1998	Approved
Construction Contract Award (McComas-Lacina Construction)	10,368,900	Sept. 1998	Ratified
Architectural Amendment #1	179,858	Dec. 1998	Approved
Architectural Amendment #2	117,614	Feb. 2001	Approved
Amended Project Budget	12,800,000	March 2001	Requested

This project includes construction of a parking ramp to the north of the Medical Education and Biomedical Research Facility to serve the Health Sciences Campus. The structure will also house the Northwest Campus Chilled Water Plant.

Project Budget

	Initial Budget Sept. 1998	Revised Budget March 2001
Construction	$ 10,818,531	$ 10,818,531
Design, Inspection and Administration	1,454,000	1,454,000
Consultants	765,815	765,815
Design and Construction Services	688,185	688,185
Contingency	527,469	527,469
TOTAL	$ 12,800,000	$ 12,800,000
Source of Funds:		
Parking System Revenue Bonds	$ 10,360,000	
Parking System Revenue Bonds and/or Parking System Improvement and Replacement Funds		$ 10,360,000
Utility System Revenue Bonds	2,440,000	2,440,000
TOTAL	$ 12,800,000	$ 12,800,000

University Parking Systems—Hospital Parking Ramp No. 2—Facility Improvements

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 1,360,000	May 1999	Approved
Architectural Agreement (Shive-Hattery)	125,933	May 1999	Approved
Construction Contract Awards			
Bid Package #1—Preventative Maintenance and Repair (Paragon Constructors)	629,878	Sept. 1999	Ratified
Bid Package #2—Replacement of Control Equipment and Lobby Renovation (McComas-Lacina Construction)	537,969	Dec. 1999	Ratified
Amended Project Budget	1,360,000	March 2001	Requested

This project has been undertaken to provide structural maintenance, equipment replacement and lobby renovations for Hospital Parking Ramp No. 2. The original life expectancy of the ramp, which was constructed in 1977, was 40 to 50 years.

Project Budget

	Initial Budget May 1999	Revised Budget March 2001
Construction	$ 1,089,380	$ 1,089,380
Design, Inspection and Administration	162,300	162,300
Contingency	108,320	108,320
TOTAL	$ 1,360,000	$ 1,360,000
Source of Funds:		
Parking System Improvement and Replacement Funds	$ 1,360,000	
Parking System Improvement and Replacement Funds and/or Parking System Revenue Bonds		$ 1,360,000

Cleary Walkway/Market Street Development
Source of Funds: Gifts and Grants, and Income from Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Cleary Walkway/Market Street Development			
Permission to Proceed		Oct. 1999	Approved
Honors Center			
Architectural Selection (Herbert Lewis Kruse Blunck)		Feb. 2000	Approved
Architectural Agreement—Site Planning (Herbert Lewis Kruse Blunck)	$ 100,500	April 2000	Approved
Architectural Agreement— (Herbert Lewis Kruse Blunck)	1,033,350	Sept. 2000	Approved
Building Program		Feb. 2001	Approved
Engineering Agreement—Site Utilities (Shive-Hattery, Iowa City, IA)	54,628	March 2001	Requested

This project would construct the Honors Center and Careers Center on the east side of the T. Anne Cleary Walkway between Market and Bloomington Streets (across from the Chemistry Building). The Honors Center, which would house the University's Honors Program and the Connie Belin and Jacqueline N. Blank International Center for Gifted Education and Talent Development, would be constructed on the north half of the site. The Careers Center, which is proposed to house expanded career counseling and placement services and other academic/student service functions, would be developed on the south half of the site. The estimated project cost for each facility is approximately $10 million.

The University requests approval of an agreement with Shive-Hattery to provide utility engineering services for the Honors Building site. This would include design services for the extension of steam, water, chilled water, telecommunications, storm and sanitary sewer, and electric distribution lines to serve the new building. The agreement provides for a fee of $54,628, including reimbursables.

Health Sciences Campus—Newton Road Relocation
Source of Funds: Institutional Roads

Project Summary

	Amount	Date	Board Action
Health Sciences Campus Plan			
Permission to Proceed		May 1996	Approved
Engineering Agreement			
(Shive-Hattery)	$ 216,000	June 1997	Approved
Project Description and Total Budget	1,800,000	June 1997	Approved
Construction Contract Awards			
Bid Package #1 (Metro Pavers)	1,013,352	June 1998	Ratified
Bid Package #2 (Metro Pavers)	518,886	Sept. 2000	Ratified
Engineering Amendment #1	23,452	July 1998	Approved
Engineering Amendment #2	33,952	March 2001	Requested

This project will reconstruct and relocate approximately 2,130 feet of Newton Road on the Health Sciences Campus. The relocation of the roadway will remove potentially unsafe vehicular traffic from this pedestrian-intensive area, improving its suitability for academic programs. The project is one component of the Health Sciences Campus Master Plan.

The University requests approval of Amendment #2 in the amount of $33,952 to the engineering agreement with Shive-Hattery. The amendment would provide compensation for various unanticipated, additional services. Included are the coordination of work within the Veterans Administration Hospital property; preparation of utility easements and a bus stop map; attendance at landscaping construction meetings; assistance in coordinating the project with other Health Sciences contractors; preparation of the relocation of telephone lines; and extension of the contract term for construction observation services due to an extended project completion date. The need to extend the completion date resulted from the various phasing requirements for the project, which were necessary to maintain access to the Health Sciences Campus construction sites and to keep one lane of Newton Road open at all times.

University Hospitals and Clinics—Pharmacy Storage, Processing and Office Support Facility—Phase 2
Source of Funds: University Hospitals Building Usage Funds

Project Summary

	Amount	Date	Board Action
Project Description and Total Budget	$ 845,000	Sept. 1998	Approved
Engineering Agreement (A and J Associates)	18,980	Oct. 1998	Approved
Construction Contract Award (McComas-Lacina Construction)	315,784	March 1999	Ratified
Engineering Amendment #1	33,000	March 2001	Requested

This project will remodel 3,374 square feet of space on the lower level of the General Hospital. The project is required to meet current standards for drug storage and processing, increase operational efficiencies, and meet Building Code exiting requirements.

The University requests approval of Amendment #1 in the amount of $33,000 to the agreement with A and J Associates. The amendment would provide compensation for the preparation of specifications and construction documents for the second construction contract for the Phase 2 project.

Institute of Hydraulics Research—Hydraulics Laboratory Modernization

Source of Funds: Institute of Hydraulic Research Balances, Gifts, Building Renewal and/or Income from Treasurer's Temporary Investments

Project Summary

	Amount	Date	Board Action
Permission to Proceed		Oct. 1999	Approved
Architectural Selection (OPN Architects)		March 2000	Approved
Architectural Agreement	$ 205,000	April 2000	Approved
Program Statement		Sept. 2000	Approved
Schematic Design		Sept. 2000	Approved
Project Description and Total Budget	4,250,000	Sept. 2000	Approved
Architectural Amendment #1	63,500	Oct. 2000	Approved
Construction Contract Awards—			
Asbestos Abatement (Active Thermal Concepts)	46,882	Feb. 2001	Ratified
General Construction (Merit Construction Company)	3,313,300	March 2001	Ratification
Telecommunications Wiring (J. W. Koehler Electric)	43,465	March 2001	Ratification
Construction Change Order #1 (Merit Construction Company)	(320,000)	March 2001	Requested

This project will renovate the Hydraulics Laboratory to meet the modern teaching and research requirements of the Iowa Institute of Hydraulic Research of the College of Engineering. The current condition of the building is not conducive to contemporary research and teaching activities nor the recruitment of faculty, staff and students.

The University requests approval of Change Order #1 in the deduct amount of $320,000 to the general construction contract with Merit Construction Company. The change order, which would provide modifications to windows, interior decorative steel, wood doors, flooring and mechanical and electrical components for the facility, would reduce the total amount of the construction contract from $3,313,300 to $2,993,300, and restore sufficient funds to the project construction budget for future contract awards.

* * * * * *

Included in the University's capital register for Board ratification is one project budget under $250,000, one amendment to an engineering agreement which was approved by the University in accordance with Board procedures, five construction contracts awarded by the Executive Director, and the acceptance of nine completed construction contracts. These items are listed in the register prepared by the University and are included in the Regent Exhibit Book.

Sheila Lodge

Approved: Frank J. Stork

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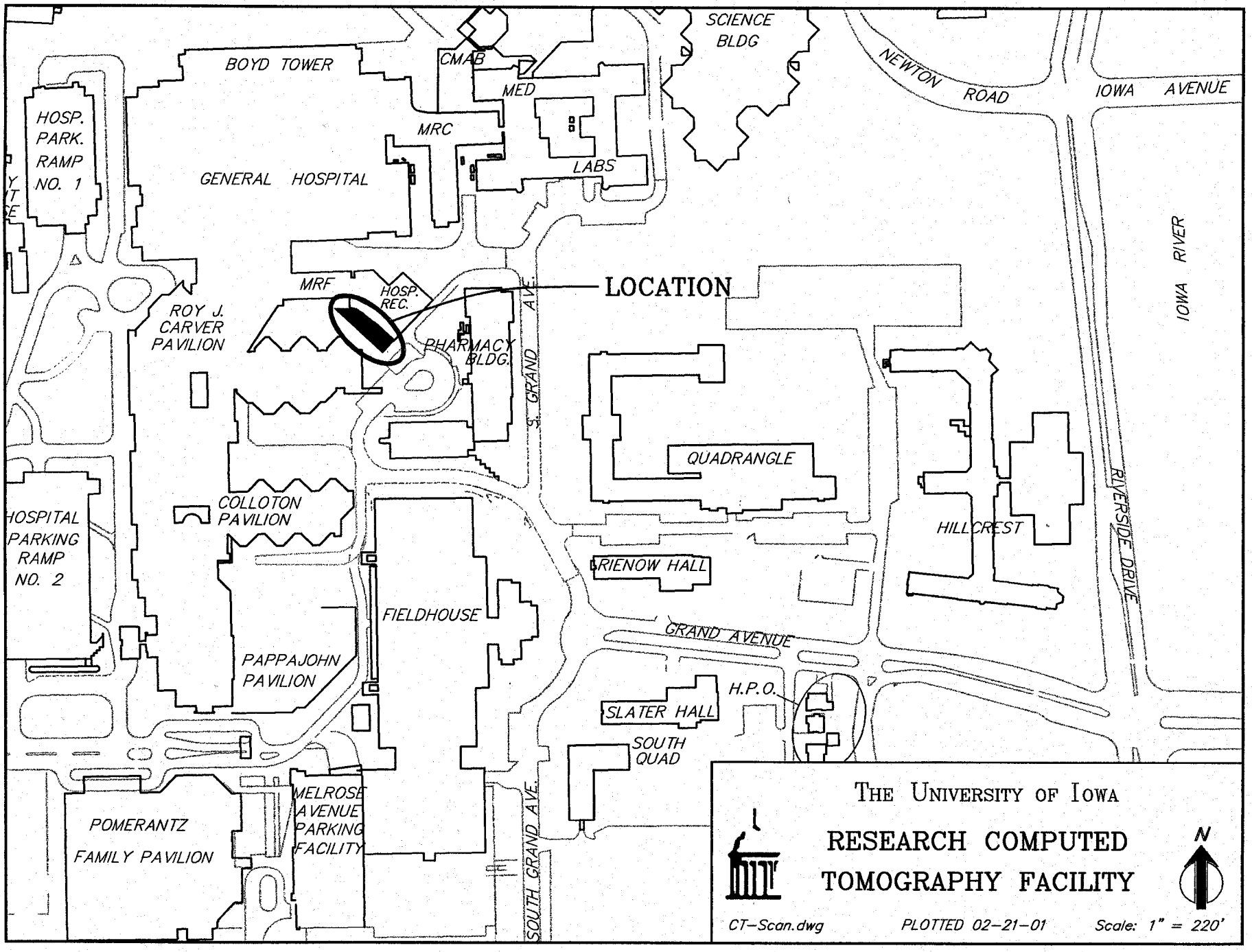
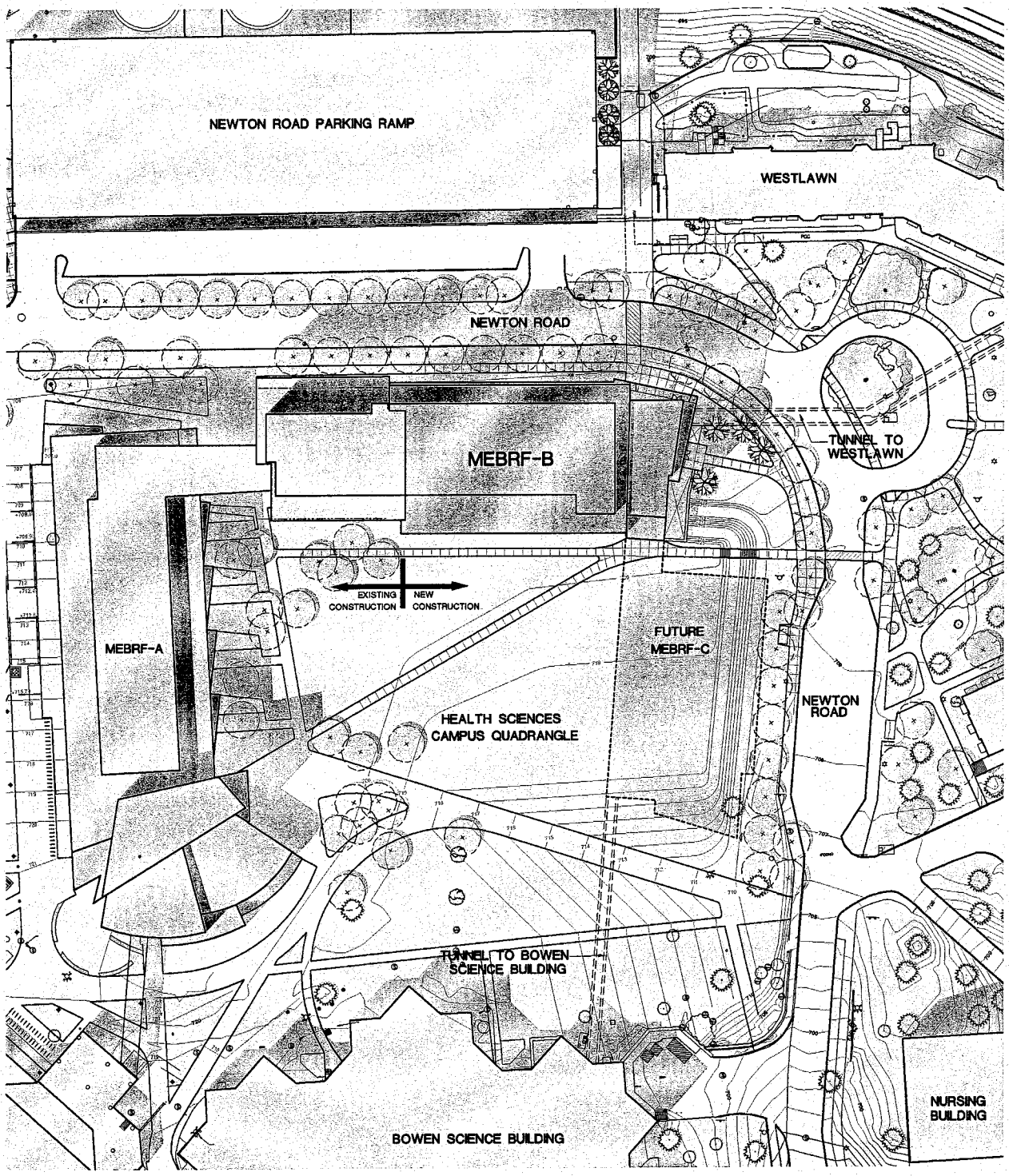


Attachment A

Site Plan

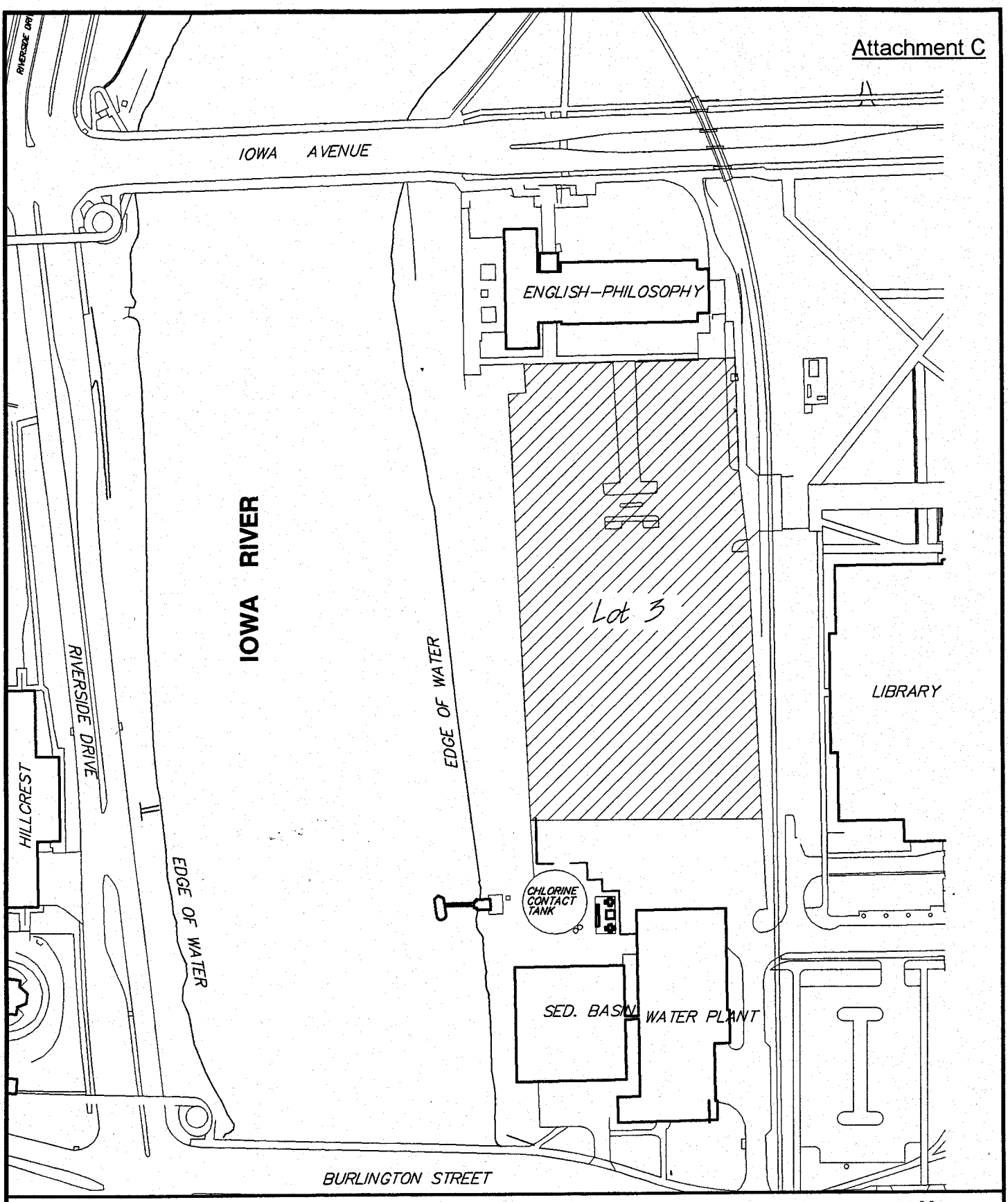


College of Medicine Quadrangle

The University of Iowa

Extension of Medical Education and Biomedical Research Facility, MEBRF-B.
March 21-22, 2001
Schematic Design Report
Payette Associates, Inc. Architects, Planners
Rohrbach Carlson, PC

Attachment C



THE UNIVERSITY OF IOWA

PARKING LOT 3 RECONSTRUCTION

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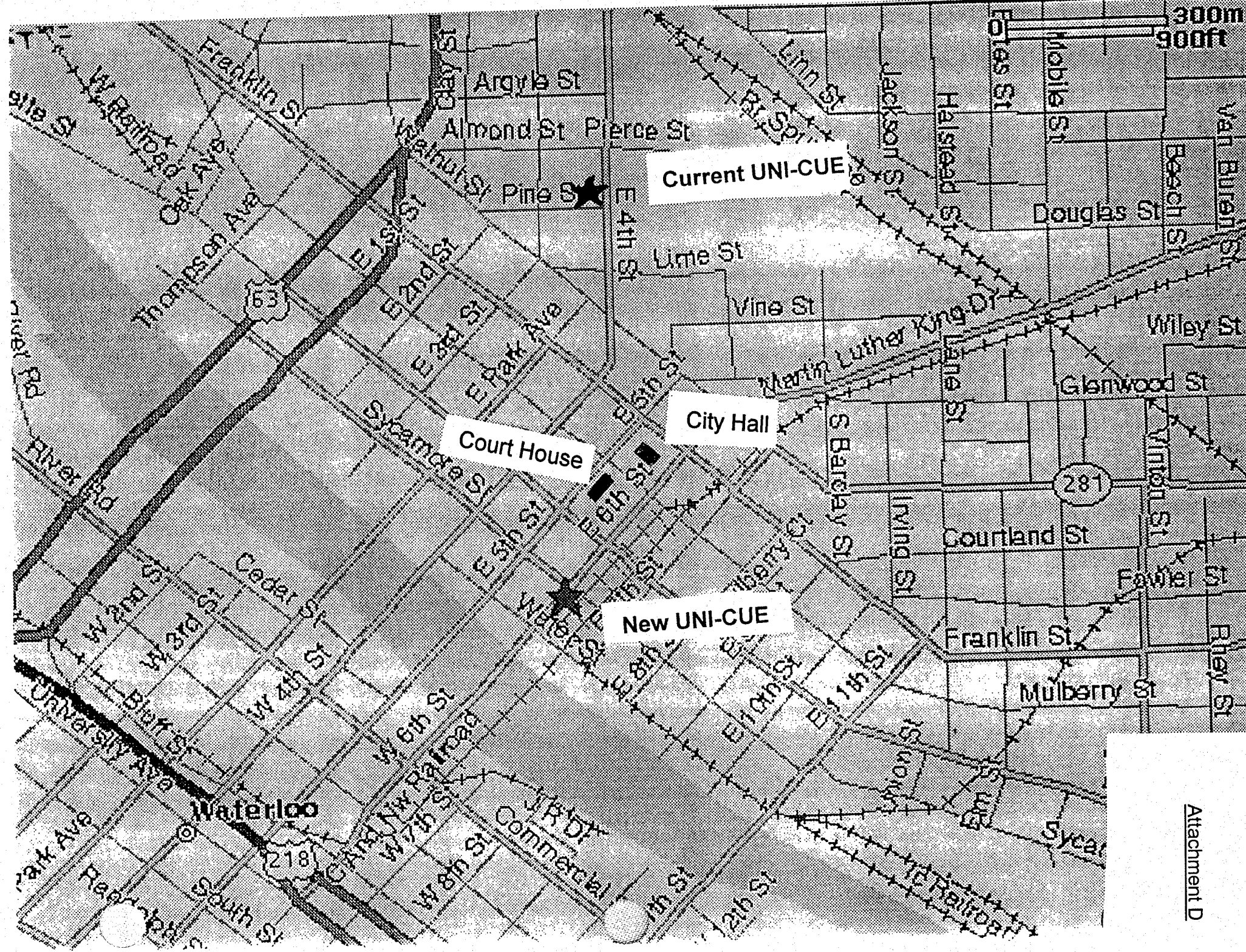
Scale: 1" = 150'

ParkLot3.dwg



Attachment D